Attorney Docket No: 27053-17244 US Client Ref: JA56149P.USP

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AMENDMENTS TO THE CLAIMS

1-111. (Cancelled)

112. (Currently Amended) A composition for promoting muscle carnitine accumulation in

human skeletal muscle, the composition comprising L-carnitine or an analogue thereof

and an agent to increase blood plasma/serum insulin concentration, and wherein the

amount by weight of said agent is at least ten times the amount by weight of said L-

carnitine or analogue thereof.

113. (Previously Presented) A composition according to claim 112 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal muscle.

114. (Previously Presented) A composition according to claim 112 wherein the agent is

operable to increase insulin activity in skeletal muscle.

115. (Previously Presented) A composition according to claim 112 wherein the agent comprises

a carbohydrate and/or an amino acid and/or a protein.

116. (Previously Presented) A composition according to claim 115 wherein the agent is a

carbohydrate.

117. (Previously Presented) A composition according to claim 115 wherein the agent comprises

an amino acid.

118. (Previously Presented) A composition according to claim 116 wherein the carbohydrate is

a sugar.

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119. (Previously Presented) A composition according to claim 116 wherein the carbohydrate comprises glucose, sucrose, and/or fructose.

- 120. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 150 times the amount by weight of said L-carnitine.
- 121. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.
- 122. (Previously Presented) A composition according to claim 112 wherein the amount by weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.
- 123. (Previously Presented) A composition according to claim 112 comprising 0.25g to 3g L-carnitine and between 2.5g and 450g of the agent.
- 124. (Previously Presented) A composition according to claim 112 comprising 0.25g to 3g L-carnitine and between 2.5g and 285g of the agent.
- 125. (Previously Presented) A composition according to claim 112 comprising 0.25g to 3g L-carnitine and between 2.5g and 120g of the agent.
- 126. (Previously Presented) A composition according to claim 112 in the form of a solution.
- 127. (Previously Presented) A composition according to claim 112 in the form of an aqueous solution.
- 128. (Currently Amended) A composition for promoting muscle carnitine accumulation in human skeletal muscle, the composition comprising 0.25g to 3g of L-carnitine or an

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analogue thereof and between 2.5g and 450g of an agent to increase blood plasma/serum

insulin concentration.

129. (Previously Presented) A composition according to claim 128 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal muscle.

130. (Previously Presented) A composition according to claim 128 wherein the agent is

operable to increase insulin activity in skeletal muscle.

131. (Previously Presented) A composition according to claim 128 wherein the agent comprises

a carbohydrate and/or an amino acid and/or a protein.

132. (Previously Presented) A composition according to claim 131 wherein the agent is a

carbohydrate.

133. (Previously Presented) A composition according to claim 131 wherein the agent comprises

an amino acid.

134. (Previously Presented) A composition according to claim 132 wherein the carbohydrate is

a sugar.

135. (Previously Presented) A composition according to claim 132 wherein the carbohydrate

comprises glucose, sucrose, and/or fructose.

136. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 150 times the amount by weight of said L-

carnitine.

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137. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.

138. (Previously Presented) A composition according to claim 128 wherein the amount by

weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.

139. (Previously Presented) A composition according to claim 128 comprising 0.25g to 3g L-

carnitine.

140. (Previously Presented) A composition according to claim 128 comprising 0.25g to 3g L-

carnitine and between 2.5g and 285g of the agent.

141. (Previously Presented) A composition according to claim 128 comprising 0.25g to 3g L-

carnitine and between 2.5g and 120g of the agent.

142. (Previously Presented) A composition according to claim 128 in the form of a solution.

143. (Previously Presented) A composition according to claim 128 in the form of an aqueous

solution.

144. (Currently Amended) A composition for increasing the carnitine content of human

skeletal muscle, the composition comprising L-carnitine or an analogue thereof and an

agent to increase blood plasma/serum insulin concentration, wherein the agent is present

in an amount sufficient to increase blood plasma/serum insulin concentration above 50

mU/l.

145. (Previously Presented) A composition according to claim 144 wherein the agent is

operable to increase sodium dependent carnitine uptake into skeletal muscle.

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146. (Previously Presented) A composition according to claim 144 wherein the agent is

operable to increase insulin activity in skeletal muscle.

147. (Previously Presented) A composition according to claim 144 wherein the agent comprises

a carbohydrate and/or an amino acid and/or a protein.

148. (Previously Presented) A composition according to claim 147 wherein the agent is a

carbohydrate.

149. (Previously Presented) A composition according to claim 147 wherein the agent comprises

an amino acid.

150. (Previously Presented) A composition according to claim 148 wherein the carbohydrate is

a sugar.

151. (Previously Presented) A composition according to claim 148 wherein the carbohydrate

comprises glucose, sucrose, and/or fructose.

152. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 150 times the amount by weight of said L-

carnitine.

153. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 95 times the amount by weight of said L-carnitine.

154. (Previously Presented) A composition according to claim 144 wherein the amount by

weight of the agent is between 10 and 40 times the amount by weight of said L-carnitine.

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155. (Previously Presented) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 2.5g and 450g of the agent.

156. (Previously Presented) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 2.5g and 285g of the agent.

157. (Previously Presented) A composition according to claim 144 comprising 0.25g to 3g L-

carnitine and between 2.5g and 120g of the agent.

158. (Previously Presented) A composition according to claim 144 in the form of a solution.

159. (Previously Presented) A composition according to claim 144 in the form of an aqueous

solution.

160. (Previously Presented) A method of increasing carnitine retention in human and/or animal

skeletal muscle, the method comprising administering a composition according to claim

112 to a human and/or animal body in need thereof.

161. (Previously Presented) A prepared human dose comprising a composition according to

claim 112.

162. (Previously Presented) A method of treatment of carnitine deficiency in the skeletal

muscle of a human subject in need thereof, comprising administering to the subject a

composition according to claim 112.

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